

SUPPLEMENTAL EXAMINER'S AMENDMENT

1. This Supplemental Examiner's Amendment is in response to the Interview conducted on 05/20/2011 and the most recent papers filed on the same day. The previous Examiner's Amendment mailed out on 04/11/2011 contained mistakes made by the Examiner. In the interview conducted on 05/20/2011, the Applicant pointed out these errors to the Examiner. This Supplemental Examiner's Amendment corrects these mistakes below. These changes made in these amendments should be considered as amendments to the most recently submitted claims filed on 12/30/2010.
2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
3. The following is an examiner's statement of reasons for allowance:
4. The closest prior arts found by the Examiner for the instant claims are Poli et al. (WO 00/64178), hereafter Poli and in view of van Lunteren (US 6611832 B1), hereafter Lunteren. Poli discloses a system for updating set top boxes on a network, and Lunteren discloses a system of finding a device on a network by utilizing an IP prefixing and matching search. Neither of these references disclose the currently amended independent claims as presented and arranged. Further, there are no obvious reasons that a person of ordinary skill in the art would combine these systems to perform the currently amended independent claims as presented and arranged. Accordingly, the

currently amended independent claims as presented and arranged are deemed as allowable.

5. The remaining dependent claims are deemed as allowable because of their dependence upon the allowed currently amended independent claims.

6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

7. Authorization for the instant examiner's amendment was given by Marie Smyth (Reg. # 65404) on 05/20/2011.

Information Disclosure Statement

8. The information disclosure statement (IDS) submitted on 05/23/2011 was filed after the mailing date of the Notice of Allowance and Fees Due on 04/11/2011 but before payment of the Issuance Fees. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Examiner's Amendments to the Claims

Please amend the claims as follows:

Claim 112

(Currently amended by Examiner) A method comprising:

receiving, by a set top box, update code streamed to the set top box by a server on a predetermined channel;

generating, by the set top box, a trigger to check whether the set top box is to invoke the update code that is streamed to the set top box by a server on a predetermined channel;

receiving, by the set top box in response to the trigger, an m-bit update flag included in the update code, wherein the m-bit flag does not uniquely identify the set top box;

accessing, by the set top box in response to the trigger, an n-bit unique hardware identifier assigned to the set top box;

comparing, within [[by]] the set top box, the m-bit update flag to a predetermined portion of the n-bit unique hardware identifier, wherein n is greater than m;

determining, based on comparing the m-bit update flag to the predetermined portion of the n-bit unique hardware identifier, that the m-bit update flag matches the predetermined portion of the n-bit unique hardware identifier; and

selectively invoking, by the set top box, the update code based on determining that the m-bit update flag matches the predetermined portion of the n-bit unique hardware identifier.

Claim 113

(Previously Presented) The method of claim 112, further comprising:

determining, in response to determining that the m-bit update flag matches the predetermined portion of the n-bit unique hardware identifier, that the update code is a newer version of code that exists on the set top box, wherein the update code is selectively invoked based on determining that the update code is a newer version of code that exists on the set top box.

Claim 114

(Previously presented) The method of claim 112, further comprising determining that the set top box has been booted or rebooted, wherein the trigger is generated based on determining that the set top box has been booted or rebooted.

Claim 115

(Previously presented) The method of claim 112, further comprising determining that a predetermined period of time has elapsed, wherein the trigger is generated based on determining that the predetermined period of time has elapsed.

Claim 116

(Previously presented) The method of claim 112, further comprising receiving a user selection, wherein the trigger is generated based on receiving the user selection.

Claim 117

(Previously presented) The method of claim 112, further comprising receiving a confirmation from the user that the update code is to be invoked, wherein the update code is invoked based on receiving the confirmation from the user.

Claim 118

(Previously presented) The method of claim 112, wherein invoking the update code further comprises identifying a future predetermined time in which the set top box is to download and run other code from the predetermined channel.

Claim 119

(Currently amended by Examiner) A method comprising:

determining, by a server, a first quantity of set top boxes to update from a plurality of set top boxes;

determining a quantity, n, of bits in an n-bit unique hardware identifier assigned to each set top box;

selecting, by the server, a value, m, based on the first quantity of set top boxes to update and the quantity, n, wherein the value, m, is less than the quantity, n;

generating, by the server, an m-bit update flag;

including, by the server, the m-bit update flag in update code; and

streaming, by the server, the update code, including the m-bit update flag, to the plurality of set top boxes on a predetermined channel.

Claim 120

(Previously presented) The method of claim 119, further comprising:

after streaming the update code to the set top boxes, determining a quantity of users that have provided feedback for the update code.

Claim 121

(Currently Amended by Examiner) The method of claim 120, further comprising:

determining, by the server, a second quantity of set top boxes to update from the plurality of set top boxes based on the quantity of users that have provided feedback for the update code;

selecting, by the server, a value, o , based on the second quantity of set top boxes to update and the quantity, n , where the value, o , is less than the quantity, n ;

generating, by the server, an o -bit update flag;

including, by the server, the o -bit update flag in update code; and

streaming, by the server, the update code, including the o -bit update flag, to the plurality of set top boxes on the predetermined channel.

Claim 122

(Currently amended by Examiner) A system comprising:

~~one or more computers~~ a set top box; and

a non-transitory computer-readable medium coupled to the ~~one or more set top box computers~~ set top box having instructions stored thereon which, when executed by the ~~one or more set top box computers~~, cause the ~~one or more set top box computers~~ set top box to perform operations comprising:

receive ~~receiving, by a set top box,~~ update code streamed to the set top box by a server on a predetermined channel;

generate ~~generating, by the set top box,~~ a trigger to check whether the set top box is to invoke the update code that is streamed to the set top box by a server on a predetermined channel;

~~receive, receiving, by the set top box~~ in response to the trigger, an m-bit update flag included in the update code, wherein the m-bit flag does not uniquely identify the set top box;

~~access, accessing, by the set top box in response to the trigger~~, an n-bit unique hardware identifier assigned to the set top box;

~~compare, comparing, by the set top box~~, the m-bit update flag to a predetermined portion of the n-bit unique hardware identifier, wherein n is greater than m;

determine ~~determining~~, based on comparing the m-bit update flag to the predetermined portion of the n-bit unique hardware identifier, that the m-bit update flag matches the predetermined portion of the n-bit unique hardware identifier; and

selectively invoke ~~invoking, by the set top box~~, the update code based on determining that the m-bit update flag matches the predetermined portion of the n-bit unique hardware identifier.

Claim 123

(Currently amended by Examiner) The system of claim 122, wherein the ~~operations further comprise~~ instructions further cause the set top box to:

determine ~~determining~~, in response to determining that the m-bit update flag matches the predetermined portion of the n-bit unique hardware identifier, that the update code is a newer version of code that exists on the set top box, wherein the

update code is selectively invoked based on determining that the update code is a newer version of code that exists on the set top box.

Claim 124

(Currently amended by Examiner) The system of claim 122, wherein the ~~operations further comprise determining~~ instructions further cause the set top box to determine that the set top box has been booted or rebooted, wherein the trigger is generated based on determining that the set top box has been booted or rebooted.

Claim 125

(Currently amended by Examiner) The system of claim 122, wherein the ~~operations further comprise determining~~ instructions further cause the set top box to determine that a predetermined period of time has elapsed, wherein the trigger is generated based on determining that the predetermined period of time has elapsed.

Claim 126

(Currently amended by Examiner) The system of claim 122, wherein the ~~operations further comprise receiving~~ instructions further cause the set top box to receive a user selection, wherein the trigger is generated based on receiving the user selection.

Claim 127

(Currently amended by Examiner) The system of claim 122, wherein the ~~operations further comprise receiving~~ instructions further cause the set top box to receive a confirmation from the user that the update code is to be invoked, wherein the update code is invoked based on receiving the confirmation from the user.

Claim 128

(Previously presented) The system of claim 122, wherein invoking the update code further comprises identifying a future predetermined time in which the set top box is to download and run other code from the predetermined channel.

Claim 129

(Currently amended by Examiner) A system comprising:

~~one or more computers~~ a server; and

a non-transitory computer-readable medium coupled to the ~~one or more server computers~~ having instructions stored thereon which, when executed by the ~~one or more server computers~~, causes the ~~one or more computers~~ server to perform operations comprising:

~~determining, by a server,~~ determine a first quantity of set top boxes to update from a plurality of set top boxes;

~~determining~~ determine a quantity, n, of bits in an n-bit unique hardware identifier assigned to each set top box;

~~selecting, by the server,~~ select a value, m, based on the quantity of set top boxes to update and the quantity, n, wherein the value, m, is less than the quantity, n;

~~generating, by the server,~~ generate an m-bit update flag;

~~including, by the server,~~ include the m-bit update flag in update code; and

~~streaming, by the server,~~ stream the update code, including the m-bit update flag, to the plurality of set top boxes on a predetermined channel.

Claim 130

(Currently amended by Examiner) The system of claim 129, wherein ~~the operations further comprise instructions further cause the server to:~~

determine, after streaming the update code to the set top boxes, ~~determining~~ a quantity of users that have provided feedback for the update code.

Claim 131

(Currently amended by Examiner) The system of claim 130, wherein ~~the operations further comprise instructions further cause the server to:~~

~~determining, by the server,~~ determine a second quantity of set top boxes to update from the plurality of set top boxes based on the quantity of users that have provided feedback for the update code;

~~selecting, by the server,~~ select a value, α , based on the second quantity of set top boxes to update and the quantity, n , where the value, α , is less than the quantity, n ;

~~generating, by the server,~~ generate an α -bit update flag;

~~including, by the server,~~ include the α -bit update flag in update code; and

~~streaming, by the server,~~ stream the update code, including the α -bit update flag, to the plurality of set top boxes on the predetermined channel.

Claim 132

(Currently amended by Examiner) A non-transitory computer storage medium encoded with a computer program, the program comprising instructions that when

executed by ~~one or more~~ a set top box computers causes the ~~one or more~~ set top box computers to perform operations comprising:

~~receiving, by a set top box,~~ receive update code streamed to the set top box by a server on a predetermined channel;

~~generating, by the set top box,~~ generate a trigger to check whether the set top box is to invoke the update code that is streamed to the set top box by a server on a predetermined channel;

~~receiving, by the set top box~~ receive, in response to the trigger, an m-bit update flag included in the update code, wherein the m-bit flag does not uniquely identify the set top box;

~~accessing, by the set top box~~ access, in response to the trigger, an n-bit unique hardware identifier assigned to the set top box;

~~comparing, by the set top box,~~ compare the m-bit update flag to a predetermined portion of the n-bit unique hardware identifier, wherein n is greater than m;

~~determining,~~ determine based on comparing the m-bit update flag to the predetermined portion of the n-bit unique hardware identifier, that the m-bit update flag matches the predetermined portion of the n-bit unique hardware identifier; and

selectively ~~invoking~~ invoke, by the set top box, the update code based on determining that the m-bit update flag matches the predetermined portion of the n-bit unique hardware identifier.

Claim 133

(Currently amended by Examiner) The non-transitory computer storage medium of claim 132, wherein the ~~operations further comprise~~ instructions further cause the set top box to:

~~determining~~ determine, in response to determining that the m-bit update flag matches the predetermined portion of the n-bit unique hardware identifier, that the update code is a newer version of code that exists on the set top box, wherein the update code is selectively invoked based on determining that the update code is a newer version of code that exists on the set top box.

Claim 134

(Currently amended by Examiner) The non-transitory computer storage medium of claim 132, wherein the ~~operations further comprise~~ instructions further cause the set top box to ~~determining~~ determine that the set top box has been booted or rebooted, wherein the trigger is generated based on determining that the set top box has been booted or rebooted.

Claim 135

(Currently amended by Examiner) The non-transitory computer storage medium of claim 132, wherein the ~~operations further comprise~~ instructions further cause the set top box to ~~determining~~ determine that a predetermined period of time has elapsed, wherein the trigger is generated based on determining that the predetermined period of time has elapsed.

Claim 136

(Currently amended by Examiner) The non-transitory computer storage medium of claim 132, wherein the ~~operations further comprise~~ instructions further cause the set top box to receiving receive a user selection, wherein the trigger is generated based on receiving the user selection.

Claim 137

(Currently amended by Examiner) The non-transitory computer storage medium of claim 132, wherein the ~~operations further comprise~~ instructions further cause the set top box to receiving receive a confirmation from the user that the update code is to be invoked, wherein the update code is invoked based on receiving the confirmation from the user.

Claim 138

(Currently amended by Examiner) The non-transitory computer storage medium of claim 132, wherein invoking the update code further comprises identifying a future predetermined time in which the set top box is to download and run other code from the predetermined channel.

Claim 139

(Currently amended by Examiner) A non-transitory computer storage medium encoded with a computer program, the program comprising instructions that when executed by ~~the one or more a server computers~~, causes ~~the one or more computers server~~ to perform comprising:

~~determining, by a server,~~ determine a first quantity of set top boxes to update from a plurality of set top boxes;

~~determining~~ determine a quantity, n, of bits in an n-bit unique hardware identifier assigned to each set top box;

~~selecting, by the server,~~ select a value, m, based on the first quantity of set top boxes to update and the quantity, n, wherein the value, m, is less than the quantity, n;

~~generating, by the server,~~ generate an m-bit update flag;

~~including, by the server,~~ include the m-bit update flag in update code; and

~~streaming, by the server,~~ stream the update code, including the m-bit update flag, to the plurality of set top boxes on a predetermined channel.

Claim 140

(Currently amended by Examiner) The non-transitory computer storage medium of claim 139, wherein the ~~operations further comprise~~ instructions further cause the server to:

~~determine,~~ after streaming the update code to the set top boxes, ~~determining~~ a quantity of users that have provided feedback for the update code.

Claim 141

(Currently amended by Examiner) The non-transitory computer storage medium of claim 140, wherein the ~~operations further comprise~~ instructions further cause the server to:

~~determining, by the server,~~ determine a second quantity of set top boxes to update from the plurality of set top boxes based on the quantity of users that have provided feedback for the update code;

~~selecting, by the server, select~~ a value, α , based on the second quantity of set top boxes to update and the quantity, n , where the value, α , is less than the quantity, n ;

~~generating, by the server, generate~~ an α -bit update flag;

~~including, by the server, include~~ the α -bit update flag in update code; and

~~streaming, by the server, stream~~ the update code, including the α -bit update flag, to the plurality of set top boxes on the predetermined channel.

Claim 142

(Previously Presented) The method of claim 119, wherein the n -bit unique hardware identifier corresponds to systematically distributed data that corresponds to a known criteria.

Claim 143

(Previously Presented) The method of claim 142, wherein the known criteria is one of a geographic region or a preferred program genre.

Claim 144

(Previously Presented) The system of claim 129, wherein the n -bit unique hardware identifier corresponds to systematically distributed data that corresponds to a known criteria.

Claim 145

(Previously Presented) The system of claim 144, wherein the known criteria is one of a geographic region or a preferred program genre.

Claim 146

(Currently amended by Examiner) The non-transitory computer storage medium of claim 139, wherein the n-bit unique hardware identifier corresponds to systematically distributed data that corresponds to a known criteria.

Claim 147

(Currently amended by Examiner) The non-transitory computer storage medium of claim 146, wherein the known criteria is one of a geographic region or a preferred program genre.

Claim 148

(Cancelled by Examiner)

Claim 149

(Currently amended by Examiner) The method of claim [[148]] 121, wherein:
the type of feedback is negative,
the ~~modified~~ second quantity of set top boxes is less than the ~~second~~ first quantity of set top boxes based on the negative feedback, and
the ~~modified~~ value, o [[o']], is less than the value, m [[o]].

Claim 150

(Currently amended by Examiner) The method of claim [[148]] 121, wherein:
the type of feedback is positive,
the ~~modified~~ second quantity of set top boxes is greater than the ~~second~~ first quantity of set top boxes based on the positive feedback, and
the ~~modified~~ value, o [[o']], is greater than the value, m [[o]].

Claim 151

(Cancelled by Examiner)

Claim 152

(Currently amended by Examiner) The system of claim [[151]] 131, wherein:

the type of feedback is negative,

the ~~modified~~ second quantity of set top boxes is less than the ~~second~~ first quantity of set top boxes based on the negative feedback, and

the ~~modified~~ value, o [[o']], is less than the value, m [[o]].

Claim 153

(Currently Amended by Examiner) The system of claim [[151]] 131, wherein:

the type of feedback is positive,

the ~~modified~~ second quantity of set top boxes is greater than the ~~second~~ first quantity of set top boxes based on the positive feedback, and

the ~~modified~~ value, o [[o']], is greater than the value, m [[o]].

Claim 154

(Cancelled by Examiner)

Claim 155

(Currently amended by Examiner) The non-transitory computer storage medium of claim [[154]] 141, wherein:

the type of feedback is negative,

the ~~modified~~ second quantity of set top boxes is less than the ~~second~~ first quantity of set top boxes based on the negative feedback, and

the ~~modified~~ value, o [[o']], is less than the value, m [[o]].

Claim 156

(Currently amended by Examiner) The non-transitory computer storage medium of claim ~~[[154]]~~ 141, wherein:

the type of feedback is positive,

the ~~modified~~ second quantity of set top boxes is greater than the ~~second~~ first quantity of set top boxes based on the positive feedback, and

the ~~modified~~ value, o ~~[[o']]~~, is greater than the value, m ~~[[o]]~~.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES BARON whose telephone number is (571)270-5661. The examiner can normally be reached on weekdays from 8 - 4 and Monday mornings.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Avellino can be reached on (571)272-3905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. B./
Examiner, Art Unit 2454

/Joseph E. Avellino/
Supervisory Patent Examiner, Art Unit 2454